

## **Appendix D: Environmental Mitigation Measures for the Yuma Area Service Highway**

## APPENDIX D

# Environmental Mitigation Measures for the Yuma Area Service Highway, Arizona

### **INTRODUCTION**

The Arizona Department of Transportation (ADOT) and Federal Highway Administration (FHWA) developed these mitigation measures to minimize and mitigate the anticipated adverse environmental effects attributable to the proposed express highway route known as the Yuma Area Service Highway (ASH), located in southwestern Yuma County, Arizona. The environmental impacts associated with the ASH have been evaluated and disclosed in accordance with the requirements of the National Environmental Policy Act (42 United States Code [USC] 4321–4347) (NEPA) and the Endangered Species Act (16 USC 1531–1544, as amended) (ESA), through consultation with the US Fish and Wildlife Service (FWS). Two species, Peirson's milk-vetch (*Astragalus magdalenae* var. *peirsonii*) and the flat-tailed horned lizard (*Phrynosoma mcallii*) (FTHL), have been determined to merit special project-related provisions for the benefit of their conservation. Background information regarding the development of these mitigation measures is provided in the body of the Final Environmental Assessment for the ASH.

### **PEIRSON'S MILK-VETCH**

Peirson's milk-vetch is listed as threatened under the ESA. Potential adverse effects to the species due to the ASH have been addressed through formal consultation with FWS. FWS's Biological Opinion, issued in April 2003, included a conservation recommendation that called for a survey to be conducted in the project area to determine if this species would be impacted by the project and to determine if additional mitigation measures would be required to minimize impacts from the project. A pedestrian transect survey for Peirson's milk-vetch was conducted in March 2005 to determine if this species is present in the project area. Peirson's milk-vetch was not detected during the March 2005 survey, despite the presence of favorable conditions for germination and growth created by substantial winter rainfall in the Yuma area.

### **FLAT-TAILED HORNED LIZARD**

The FTHL is managed through the interagency FTHL Conservation Agreement—the species is not listed under the ESA. The Conservation Agreement established the FTHL Management Oversight Group (MOG) and the Interagency Coordinating Committee (ICC), each with representatives from all of the signatory agencies. Conservation measures adopted under the Agreement are identified in the 2003 *FTHL Rangeland Management Strategy* (RMS) prepared by the ICC. The RMS provided management recommendations to signatory agencies and is voluntarily implemented through the authorities of each agency on lands under each agency's jurisdiction. Impacts to the FTHL attributable to the ASH would be addressed in accordance with the FTHL Conservation Agreement and RMS.

**A. Minimization of Threats to FTHLs in the Adjacent Yuma Desert Management Area.**

Threats to the FTHLs in the Yuma Desert MA would be minimized by addressing specific management issues, including the proposed City of Yuma landfill and trespassing by off-highway vehicles. ADOT would mitigate for the isolation and/or loss of approximately 1,760 acres of FTHL habitat in Parcel 2 from the MA by one of the following two options:

Option A. ADOT would enter into an Intergovernmental Agreement with the City of Yuma and the Bureau of Reclamation (Reclamation), prior to construction of the ASH between Avenue 4E to Avenue B, to exchange the existing proposed landfill site for Reclamation land north of County 23<sup>rd</sup> Street. ADOT would reimburse the City of Yuma for the cost of transferring the land to Reclamation and of obtaining an in-kind parcel on Reclamation land. To reimburse the City of Yuma for funds that have been expended in preparation for the site's development as a landfill, ADOT would provide funding for any in-kind investigations or permits that the City of Yuma has already invested in for the portion of the landfill site south of County 23<sup>rd</sup> Street. Under Option A, ADOT would receive a credit of 328 acres towards its obligation for habitat compensation in recognition of its efforts to address threats to FTHLs in the Yuma Desert MA. Therefore, ADOT would compensate for the loss of approximately 1,432 acres of FTHL habitat, providing all funds necessary to complete the purchase of replacement habitat and transfer of the title to BLM.

Option B. ADOT would compensate for the loss of approximately 1,760 acres of FTHL habitat, providing all funds necessary to complete the purchase of replacement FTHL habitat and transfer of the title to BLM.

- 1) Under Options A or B, within a year of the approval of the EA, ADOT would develop an Intergovernmental Agreement with Reclamation for the construction of standard right-of-way fencing along the western boundary of the Yuma Desert MA. ADOT would fund the construction of the fence including design, materials, construction and contract administration. Reclamation would provide necessary construction easements and National Environmental Policy Act clearances for the fence. Items such as length, location, maintenance and clearances for the fencing would be determined during the formulation of the Intergovernmental Agreement.

**B. Habitat Compensation.** Compensation would be provided for FTHL habitat that is under the jurisdiction of agencies that are signatory to the FTHL Conservation Agreement, and is lost or isolated due to the construction of the ASH.

- 1) ADOT would fully compensate for approximately 623 acres of FTHL habitat lost to the ASH right-of-way and approximately 3,654 acres of FTHL habitat isolated by the ASH. If the City of Yuma agrees to a land exchange that would relocate the landfill site north of the ASH, ADOT would receive a credit of 328 acres towards its obligation for habitat compensation in recognition of its efforts to address threats to FTHLs in the Yuma Desert MA.
- 2) BLM would provide a priority list for FTHL parcels targeted for acquisition.

- 3) ADOT would appraise the priority properties identified by BLM.
- 4) ADOT would use appraised values to calculate compensation funds; the calculated values would include due diligence costs and administrative costs.
- 5) ADOT would then transfer compensation funds to BLM's compensation fund accounts as delineated in the FTHL RMS (FTHL ICC 2003).

**C. FTHL Barrier Fencing.** Special fencing would be constructed to prevent FTHLs from entering construction zones or roadways.

- 1) Standard ADOT right-of-way game fencing would be modified so that the bottom two strands of barbed wire are at 15 inches and 30 inches above the ground. FTHL barrier material would be securely fastened to fence posts and to the bottom two strands of barbed wire using metal clips or wire, not plastic. The barrier material would consist of 0.25-inch wire mesh that extends 6 inches below the ground surface and 30 inches above the ground surface. Additional fence posts would be placed at any junctions between segments of wire mesh to prevent the formation of gaps. Where barrier fencing ends, the wire mesh would be extended in an arc in the opposite direction from the roadway for a distance of 3 to 10 feet, to direct animals moving along the fence away from the road. The arcing portion of the fence would be supported by stakes or fence posts and buried to a depth of 6 inches, and would not leave the ADOT right-of-way.
- 2) ADOT Yuma District would be responsible for the maintenance of FTHL barrier fence along the ASH right-of-way to ensure its effectiveness, including but not limited to the repair of gaps under or in the fence and the removal of accumulated debris or sand along the fence. The FTHL barrier fence would be inspected daily by biological monitors from April through September in active construction areas, and every four weeks over that period in other areas for the first year following construction of the fence. If breaks occur in the FTHL barrier fence during construction, a minimum of 1 acre of the adjacent exclusion zone would be resurveyed to remove FTHLs. In following years, while construction of the ASH continues, the barrier fence would be inspected in March and July. ADOT Yuma District would also inspect the FTHL barrier fence in March and July each year after construction is complete. The flat-tailed horned lizard fencing would remain in place and be maintained until such time that this protection for the flat-tailed horned lizard is not required or has been determined not to be effective, as determined by the adjacent land managing agencies.
- 3) ADOT Yuma District and the contractor would ensure that FTHL barrier fencing is incorporated into the ASH right-of-way fence in the following locations:
  - On the east side of the right-of-way from the BMGR boundary at County 14<sup>th</sup> Street south to County 23<sup>rd</sup> Street, then continuing on the south side of the ASH as it turns west to the Arizona State Prison Complex, a distance of approximately 15 miles.

- On the south side of the ASH right-of-way from Avenue B at the Arizona State Prison Complex to end at Avenue C, a distance of approximately 1 mile.
- On the north side of the ASH right-of-way along the County 23<sup>rd</sup> Street alignment from Avenue B west to end at Avenue E (where the ASH turns to the south), a distance of approximately 3 miles.

**D. Biological Monitors.** Biological monitors would be present during construction activities to oversee adherence to, and implement, conservation actions for the FTHL.

- 1) The contractor would provide biological monitors who are experienced and capable of conducting FTHL field monitoring and migratory bird nest searches. Biological monitors would have sufficient education and field experience to understand FTHL biology and behavior and to be able to identify FTHL tracks and scat. Only persons working under a valid AGFD Scientific Collecting Permit would be allowed to handle and relocate FTHLs. The contractor would submit the names and qualifications of the biological monitors to ADOT Yuma District and ADOT EEG for review and approval.
- 2) The biological monitors would have the authority to oversee compliance with protective measures for the FTHL and would be the primary contact for matters associated with these measures. The biological monitors would have the responsibility to notify the ADOT Resident Engineer and ADOT EEG to halt activities that are in violation of the mitigation terms and conditions.
- 3) Biological monitors would be present to oversee all surface-disturbing activities, including the construction of FTHL barrier fencing, to search for and remove FTHLs from the area. The work area would be examined periodically, at least hourly when surface temperatures exceed 30° Celsius, for the presence of FTHLs. In addition, all sites likely to trap a lizard (e.g., open pipeline trenches, holes, deep excavations) would be inspected for the presence of FTHLs each day and prior to backfilling from April through September. Trenches, holes, and excavations would be covered to prevent entrapment of FTHLs. If FTHL barrier fencing has been constructed that effectively isolates the work area from other FTHL habitat, and FTHLs have been removed from this established exclusion zone, then biological monitors would not need to be present during construction activities.
- 4) Before additional ground-disturbing activities can occur in areas isolated from other FTHL habitat by barrier fencing, FTHL removal surveys must first be completed. Survey methods are based on the protocols in the RMS and would be implemented to maximize captures of FTHLs, would incorporate a systematic component (e.g., transects), and may include methods such as raking around shrubs and driving on roadways within the exclusion area to search for FTHLs. The minimum survey effort to establish an FTHL exclusion zone would be 0.5 hour per acre of FTHL habitat. Surveys would be conducted between April 1 and September 30, when temperatures are between 25° and 37° Celsius. Surveys would not be conducted during inclement weather conditions (e.g., rain, high winds) that could affect the movements of FTHLs.

FTHL removal from the area could continue outside of protocol survey periods since the intent is to move animals from harm's way.

- 5) The FTHL barrier fence would be inspected daily by biological monitors from April through September in active construction areas, and every four weeks over that period in other areas for the first year following construction of the fence. If breaks occur in the FTHL barrier fence during construction, a minimum of 1 acre of the adjacent exclusion zone would be resurveyed to remove FTHLs. In following years while construction of the ASH continues, the barrier fence would be inspected in March and July. Additional surveys for FTHLs within established exclusion zones would be conducted the first spring, April through May, after establishment of the exclusion zone. These removal surveys would focus on high-quality FTHL habitat and the area adjacent to the barrier fence, and would include a minimum level of effort of 1 hour of survey per 10 acres of FTHL habitat.
- 6) In areas where only one side of the right-of-way has FTHL exclusion fencing (e.g., on the BMGR), there would be no enclosure fence preventing other FTHLs from entering the area following removal. Therefore, removal surveys would include the area of FTHL habitat on federal lands within 400 yards adjacent to the fence and crossing the right-of-way.
- 7) Biological monitors may use temporary FTHL barrier fencing to isolate areas while FTHL exclusion surveys are being conducted to prevent FTHLs from reentering the area. Temporary barrier fencing would include 0.25-inch wire mesh screen held in place with stakes or posts.
- 8) Removal surveys would be conducted in a manner that prevents FTHLs from reentering construction areas. This would be accomplished specifically through the use of temporary FTHL barrier fencing, continuous surveys during the FTHL's active period (i.e., surveys conducted 7 days a week), and/or resurvey of previously surveyed habitat if continuous surveys could not be accomplished because of inclement weather, etc. If surveys were halted for 1–2 days, 200 yards along the ASH alignment would be resurveyed. If surveys were halted for more than 2 days, 400 yards along the ASH alignment would be resurveyed.
- 9) The ASH alignment along County 23<sup>rd</sup> Street between Avenue B and Avenue C would have FTHL barrier fencing on both sides of the right-of-way. Intensive FTHL removal surveys would be conducted within the barrier-fenced right-of-way prior to any ground-disturbing activities, except for fence construction. This area would require a minimum level of effort of at least 0.5 hour per acre.
- 10) The removal and relocation of FTHLs would be coordinated with MCASY biologists. Biological monitors would ensure that all FTHLs requiring relocation would be placed in the shade of a large shrub at least 2 miles from the site within the Yuma Desert MA, or given to a MCASY biologist for release. If surface temperatures in the sun are less than 30° Celsius or exceed 50° Celsius, the monitor would hold the lizard for later release. Captured FTHLs held for later release would be kept in a cloth bag and

cooler, or other appropriate clean, dry container from which the lizard cannot escape. Captured lizards would be held at temperatures between 25° and 35° Celsius and would not be exposed to direct sunlight. Release would occur as soon as possible after capture and during daylight hours when surface temperatures range from 32° to 40° Celsius. If such conditions do not occur within 48 hours of capture, the lizard would be transferred to a terrarium containing at least 2 inches of sand from the project area. The terrarium would be maintained at 10° to 20° Celsius until conditions at the site are appropriate for release. Lizards would be allowed to acclimate to higher surface temperatures prior to release. The biological monitors would be allowed some judgment and discretion to ensure that survival of FTHLs found in the project area is likely.

- 11) Accurate records would be maintained by biological monitors for each relocated FTHL, including sex; snout-vent length; weight; temperature; location, date, and time of capture and release; a close-up photo of the lizard; and a photo of the habitat where the lizard was first encountered. A sample of the lizard scat would be collected, if possible. A Horned Lizard Observation Data Sheet and a Project Reporting Form (attached) are to be used and are provided in the RMS. This information would be included in an annual mitigation report and would also be needed for reports submitted to permitting agencies.
- 12) The contractor would provide an annual mitigation report, prepared by the biological monitors, to ADOT Yuma District and ADOT EEG. ADOT would review and provide comment on the report prior to distribution to Reclamation, BLM, MCASY, AGFD, FWS, and the ICC at the end of each calendar year that project implementation occurs. The annual mitigation report would include completed Horned Lizard Observation Data Sheets and a Project Reporting Form from the RMS (attached); a summary of information regarding the numbers of captured, relocated, and dead FTHLs; and other relevant information associated with the ASH. By the end of the year in which the ASH is completed, a final report that details the results of each FTHL mitigation action would be submitted by the contractor. The final report would include, at a minimum, data on FTHLs captured and relocated, numbers found dead, effects on FTHL habitat outside of approved areas, and an analysis of the degree of compliance with, and effectiveness of, each mitigation requirement. Documentation of nest searches for birds protected under the Migratory Bird Treaty Act and searches for Peirson's milk-vetch would be included in annual and final reports.

**E. Construction Activities.** General construction activities would be conducted in a manner that minimizes mortality of FTHLs and degradation of habitat.

- 1) In areas where FTHL removal surveys have not been conducted, all ground-disturbing activities on federal lands (i.e., south of County 14<sup>th</sup> Street) would be restricted, to the maximum extent possible, to the FTHL's active period of April through September, when temperatures are between 25° and 37° Celsius, to allow for the location and removal of FTHLs from the area of ground disturbance. The outer boundaries of the work area would be flagged and/or marked, workers would be informed to limit ground-disturbing activities to the area within those flagged and/or marked limits, and biological monitors would be present to observe work activities.

- 2) The timing of ground-disturbing activities would not be restricted after the construction area has been isolated from other FTHL habitat by barrier fencing and biological monitors have cleared the work area of FTHLs, establishing an FTHL exclusion zone. From that point on, biological monitors would not need to be present when ground-disturbing work occurs.
- 3) Existing roads would be used for travel and equipment storage whenever possible, and the number of access roads to the construction site would be kept to a minimum.
- 4) The use of temporary gates would be required for construction equipment to gain access to the right-of-way corridor through the right-of-way fence. These gates would be kept to a minimum and would have an FTHL barrier securely fastened to the gate. The gate would be constructed such that the barrier remains effective when the gate is shut. When not in use, temporary access gates would be shut to prevent FTHLs from entering the work area. The FTHL barrier would consist of 0.25-inch wire mesh that would rest on the ground surface and extend 30 inches above the ground surface.
- 5) The number of permanent gates installed along the right-of-way for MCASY and the US Border Patrol would be determined through coordination with MCASY and the US Border Patrol during final design. Once the number of permanent gates and their locations have been determined, ADOT Yuma District would notify ADOT EEG of the locations, and ADOT EEG would contact the ICC to determine whether those access gates warrant fitting with lizard barrier fencing.
- 6) When not in use during construction of the ASH, permanent access gates installed for MCASY and the US Border Patrol would be locked to prevent access by unauthorized personnel into the Yuma Desert MA from the ASH.
- 7) The contractor would restrict all ground-disturbing activities, including staging, equipment storage, parking, and other construction related activities, to the ASH right-of-way from which FTHLs have been excluded. For any area of FTHL habitat that is disturbed and located outside of the right-of-way and not within nonviable, compensated parcels (e.g., between the ASH alignment and the western boundary of the BMGR), the contractor would prepare a habitat restoration plan for ADOT Yuma District, ADOT Roadside Development Section, and ADOT EEG review and approval. ADOT EEG would submit the habitat restoration plan to the land management agency and the ICC. The plan would consider and include, as appropriate, stockpiling and replacement of topsoil, seedbed preparation, fertilization, seeding and transplanting of native species, noxious weed control, and additional erosion control. Restoration would be completed by the contractor following use of the site and would include elimination of any hazards to FTHLs created by construction, such as holes and trenches in which lizards might become entrapped.



## **F. Information for On-site Personnel.**

- 1) The contractor, in coordination with the biological monitors, would provide information to all on-site personnel working on the ASH about FTHLs. An environmental orientation program on the FTHL and the Yuma Desert MA would be prepared by the biological monitor, reviewed and approved by ADOT Yuma District and ADOT EEG, and presented to ASH construction personnel at least once a year in early spring during every year in which ground-disturbing activities occur. This presentation would include, but not be limited to a summary of the biology and status of the FTHL, information on the importance of exercising care within and around the project area to reduce FTHL mortality, and a summary of protection measures included in the project specifications that are designed to reduce potential impacts to the species.
- 2) All on-site personnel would be instructed that ground-disturbing activities on federal land are restricted to areas from which FTHLs have been excluded, which are demarcated with lizard barrier fencing or flagging, and/or specially marked areas where biological monitors are present to observe work activities.
- 3) The contractor would provide biological monitors with contact information for the ADOT Resident Engineer and ADOT EEG. A biological monitor would be notified by the contractor or ADOT personnel if workers encounter an FTHL in the field.
- 4) Wallet-sized cards summarizing FTHL information in English and Spanish would be developed by the biological monitors and provided to all on-site personnel following review and approval by ADOT Yuma District and ADOT EEG.

**G. Signs to Provide Information to the Public.** Signs would be provided by ADOT to communicate information on the FTHL and management restrictions in the Yuma Desert MA to persons entering the area from the ASH.

- 1) The contractor would provide and place "No Trespassing" signs on the ASH right-of-way fence within the BMGR. ADOT would coordinate with MCASY during final design regarding the design, message, number, and location for the signs. ADOT Statewide Project Management Section would submit the sign specifications to ADOT Roadside Development Section for review and approval. At least one sign would be placed every mile and at each intersection or gate in the right-of-way fence. Signs would be in place prior to opening the ASH to traffic, and signs would be maintained and replaced, as necessary, by ADOT Yuma District. These signs may alternate with Management Area signs, as appropriate.
- 2) The contractor would provide and place signs identifying the Yuma Desert MA on the ASH right-of-way fence adjacent to the MA. ADOT would coordinate with Reclamation and MCASY during final design regarding the design, message, number, and location of the signs. ADOT Statewide Project Management Section would submit the sign specifications to the ADOT Roadside Development Section for review and approval. At least one sign would be placed every mile and at each intersection or gate in the right-

of-way fence. Signs would be in place prior to opening the ASH to traffic and signs would be maintained and replaced, as necessary, by ADOT Yuma District. These signs may alternate with the "No Trespassing" signs on the BMGR, as appropriate.

- 3) The contractor would provide and place one or more signs adjacent to the Yuma Desert MA to provide regulatory information about the MA (e.g., vehicles restricted to existing roads, speed limits within the MA) and basic information about the FTHL to persons entering the MA. ADOT and ADOT EEG would coordinate with Reclamation and members of the ICC during final design regarding the design, message, and placement of the sign(s). ADOT Statewide Project Management Section would submit the sign specifications to ADOT Roadside Development Section for review and approval. The sign(s) would be in place prior to opening the ASH to traffic along the County 23<sup>rd</sup> Street alignment. The ADOT Roadside Development Section would review the sign specifications prior to final placement of the sign(s).

### **MIGRATORY BIRD TREATY ACT**

Nesting migratory birds protected under the Migratory Bird Treaty Act may occur within the project area.

- 1) Surveys for nests of migratory birds protected under the Migratory Bird Treaty Act would be conducted by the biological monitors hired by the contractor and completed prior to, but not sooner than 7 days before any ground-disturbing activities occurring during the breeding season, January through June. If active nests are found, a wildlife rehabilitator permitted by FWS and AGFD to remove such nests would be contacted and contracted, as necessary, to remove the nests and any associated eggs or nestlings. A report documenting these efforts would be included in the annual mitigation report provided by the contractor and biological monitors to ADOT EEG.

### **ARIZONA NATIVE PLANT LAW**

There are protected native plants within the project area that would be impacted by the ASH.

- 1) In accordance with the Arizona Native Plant Law, a Notice of Intent to Clear Land of protected native plants on nonfederal lands would be submitted by the ADOT Roadside Development Section to the Arizona Department of Agriculture at least 60 days prior to any activity, and efforts to salvage plants, if appropriate, would then be delineated.

**Horned Lizard Observation Data Sheet**

Sheet # \_\_\_\_\_

(Time should be recorded in 24:00 clock)

Use NAD27 projection and specify UTM Zone \_\_\_\_\_

Observer		Date		Time	Easting (UTM)	Northing (UTM)	Plot #	I.D. #	Photo #
Species		Sex		SVL (mm)	Weight (g)	Notes:			
FTHL	DHL	M	F						
Observer		Date		Time	Easting (UTM)	Northing (UTM)	Plot #	I.D. #	Photo #
Species		Sex		SVL (mm)	Weight (g)	Notes:			
FTHL	DHL	M	F						
Observer		Date		Time	Easting (UTM)	Northing (UTM)	Plot #	I.D. #	Photo #
Species		Sex		SVL (mm)	Weight (g)	Notes:			
FTHL	DHL	M	F						
Observer		Date		Time	Easting (UTM)	Northing (UTM)	Plot #	I.D. #	Photo #
Species		Sex		SVL (mm)	Weight (g)	Notes:			
FTHL	DHL	M	F						
Observer		Date		Time	Easting (UTM)	Northing (UTM)	Plot #	I.D. #	Photo #
Species		Sex		SVL (mm)	Weight (g)	Notes:			
FTHL	DHL	M	F						
Observer		Date		Time	Easting (UTM)	Northing (UTM)	Plot #	I.D. #	Photo #
Species		Sex		SVL (mm)	Weight (g)	Notes:			
FTHL	DHL	M	F						
Observer		Date		Time	Easting (UTM)	Northing (UTM)	Plot #	I.D. #	Photo #
Species		Sex		SVL (mm)	Weight (g)	Notes:			
FTHL	DHL	M	F						
Observer		Date		Time	Easting (UTM)	Northing (UTM)	Plot #	I.D. #	Photo #
Species		Sex		SVL (mm)	Weight (g)	Notes:			
FTHL	DHL	M	F						

## Project Reporting Form

### for Projects or Activities that Disturb Flat-tailed Horned Lizard Habitat

*This form is to be filled out before project initiation **and** after project completion.*

*If this form is used for reporting unauthorized disturbances (within or outside of MAs), document all information sources, preferably with publicly available documents. In all cases, respect private property rights.*

#### PROJECT DESCRIPTION/LOCATION:

Project Number: \_\_\_\_\_ Authorizing Agency: \_\_\_\_\_ Field Contact Rep: \_\_\_\_\_

Project name/description: \_\_\_\_\_

Project proponent: \_\_\_\_\_ Authorized: \_\_\_\_\_

Unauthorized: \_\_\_\_\_

Project type: Construction \_\_\_\_\_ Military Maneuver \_\_\_\_\_ Land Disposal \_\_\_\_\_ Maintenance of Existing Project \_\_\_\_\_  
Intrusive Research \_\_\_\_\_ Recreation/Interpretive Development \_\_\_\_\_ Mining (includes sand and gravel) \_\_\_\_\_  
Other (describe) \_\_\_\_\_

Project location: (attach map showing location and footprint of project)

Within MA \_\_\_\_\_ (indicate which MA) \_\_\_\_\_

Outside MA \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_ 1/4 Section \_\_\_\_\_

#### EFFECTS OF THE PROJECT:

Growth inducing effects: Yes \_\_\_\_\_ No \_\_\_\_\_ Previously disturbed: Yes \_\_\_\_\_ No \_\_\_\_\_ Partly \_\_\_\_\_

Duration of effect: Short term (<10 yrs) \_\_\_\_\_ Long term (≥10 yrs) \_\_\_\_\_ New access: Yes \_\_\_\_\_ No \_\_\_\_\_

Acres lost as habitat: \_\_\_\_\_ Acres degraded: \_\_\_\_\_

Lands outside project footprint: Not affected \_\_\_\_\_ Adversely affected \_\_\_\_\_

#### MITIGATION/COMPENSATION:

Mitigation required: Yes \_\_\_\_\_ No \_\_\_\_\_ Mitigation plan: Yes \_\_\_\_\_ No \_\_\_\_\_ Mitigation type: Construction limited to 11/15-2/15 \_\_\_\_\_ Worker education \_\_\_\_\_ Location altered \_\_\_\_\_ FCR \_\_\_\_\_ Define and limit work areas \_\_\_\_\_ Biological monitor \_\_\_\_\_ Preconstruction surveys \_\_\_\_\_ Perimeter lizard fence \_\_\_\_\_ Restoration \_\_\_\_\_ Post-project monitoring \_\_\_\_\_ Other \_\_\_\_\_

Compensation required: Yes \_\_\_\_\_ No \_\_\_\_\_ Compensation type: \$(amount) \_\_\_\_\_ Lands(acres): \_\_\_\_\_

If compensation is lands: Lands transferred to: \_\_\_\_\_

Location of lands: \_\_\_\_\_

#### FTHL OBSERVATIONS:

FTHL Observed on Project Site: Yes \_\_\_\_\_ No \_\_\_\_\_ If Yes, fill out the FTHL Observation Data Sheet

#FTHLs relocated \_\_\_\_\_ #FTHLs killed \_\_\_\_\_ #FTHLs injured \_\_\_\_\_

COMMENTS: \_\_\_\_\_ (continue other side if needed)

Preparer (print): \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Mail a copy of this form and any additional data to the Secretary of the Interagency Coordinating Committee